

Remarks

Claims 1-11 are pending in the present application. By this amendment, claims 1, 3, 10, and 11 have been amended. No new matter is believed added.

Claims 1-11 are objected to because of several informalities. Claims 1, 3, 10, and 11 have been amended to correct the informalities pointed out by the Examiner.

Claims 2-9 are rejected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and upon correction of informalities. Applicants gratefully acknowledge the Examiner's indication of allowable subject matter.

Claims 1, 10, and 11 are rejected under 35 U.S.C. 102(e) over Kober et al. (US 6,430,216), hereafter "Kober." This rejection is defective because Kober fails to teach or suggest each and every feature of the claims as required by 35 U.S.C. 102(e).

Claim 1 includes the feature of "forming at least one orthogonal projection of at least one output signal $y_i(k)$ onto a vector \mathbf{p}_i which is assigned to this output signal $y_i(k)$."

Claims 10 and 11 include a similar feature. The claimed "orthogonal" projection can be seen, for example, in Figure 5 of the present patent application. In particular, the broken

line in Figure 5 representing the projection onto the vector p_i clearly forms an angle of 90° with that vector.

Applicants respectfully submit that Kober fails to teach or suggest, among other features, the claimed formation of "at least one orthogonal projection ..." In particular, Kober discloses the use of an oblique projection of a signal vector as shown, for example, in Figure 4 of Kober. For such an oblique projection, the projection line strikes the projection plane at any angle different from ninety degrees - as opposed to orthogonal projectors which always strike a plane of projection at ninety degrees.

It should also be noted that Kober discloses a RAKE receiver for signal demodulation for a code division multiple access (CDMA) system. As known in the art, CDMA signals are characterized by a mixture of weighted spreading sequences, where the weights are given by the data coefficients. At the receiver, typically the RAKE principle or a refinement thereof is applied. In the present invention, however, FDMA/TDMA signals are used and, consequently, the RAKE principle cannot be used - a receiver for a non-spread signal has to be employed.

Accordingly, since Kober fails to teach or suggest each and every feature of the claims as required by 35 U.S.C. 102(e), Applicants respectfully submit that claims 1-11 are

allowable.

If the Examiner believes that anything further is necessary in order to place the application in better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



By: John A. Merecki
Reg. No.: 35,812

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Hoffman, Warnick & D'Alessandro LLC
75 State Street, 14th Floor
Albany, New York 12207
518-449-0044
jmerecki@hwdpatents.com